ABSTRACT

Background:.

Aim: *The aim of this study was to observe the effectiveness of the cleanliness of the root canal wall under ultrasonic activation, sonic activation and conventional* ***Method:*** *30 samples of premolar teeth divided into three groups (sonic irrigation, ultrasonic irrigation, conventional irrigation technique as control group). Teeth were preparated using ProTapper Next rotary file. Each group irrigated using 2,5 % NaOCl solution and the level of cleanliness was seen with SEM*

Result: *All sample were examined and data was statiscally analysed using Kruskal-Wallis with significantly different (p<0,05) .* ***Conclusion:*** *There are significant differences among different intracanal cleaning protocols in the removal efficiency of detritus from the root canal, being the activated protocols the most effective ones.*

Keyword*: Passive ultrasonic irrigation, sonic activation, irrigation technique, smear layer, cavitation, vapour lock effect, acoustic streaming*